

Plant nutrition courier

The best bits of plant nutrition research

2021-05

Scientists advocate more ammonium in plant nutrition 3

Root-secreted compounds combat nitrification in rhizosphere 4

Knotweed rhizome releases potent denitrification inhibitors 8

Ribwort plantain reduces nitrogen losses from grass and cows 10



Scientists advocate more ammonium in plant nutrition 3

A higher share of ammonium in the nitrogen nutrition will mitigate nitrogen pollution, boost crop yields and meet the rising food demand. With these arguments, two scientists advocate a more ammonium-based fertilisation regime. Other scientists think that ammonium-based plant nutrition is not as simple as it seems.



Root-secreted compounds combat nitrification in rhizosphere 4

Wild rye roots release potent nitrification inhibitors. Plant breeders have transferred the chromosome segment carrying the responsible genes to wheat varieties. Scientists have high expectations of the suppression of nitrifiers in the rhizosphere by root-released nitrification inhibitors.



Knotweed rhizome releases potent denitrification inhibitors 8

Asian knotweed rhizomes release compounds that inhibit the transformation of nitrate into gaseous nitrogen. The compounds have been tested with field-grown vegetables. An affordable source of these substances has not yet been found.

Ammonium-based plant nutrition

- 3 Scientists advocate more ammonium in plant nutrition

Biological nitrification and denitrification inhibition

- 4 Root-secreted compounds combat nitrification in rhizosphere
- 5 Editorial: Money tap must open further for research into ammonium-based plant nutrition
- 8 Knotweed rhizome releases potent denitrification inhibitors
- 9 Plant nutrition on the web: BNI International Consortium
- 10 Ribwort plantain reduces nitrogen losses from grass and cows

Service

- 12 Calendar of events
- 15 Colophon

Cover photograph:

Ribwort plantain without grass, in the first year after sowing. Commercial cultivars have large, fairly upright leaves. Ribwort plantain flowers almost the entire growing season. Photograph: Jeroen Pijlman, Louis Bolk Institute, The Netherlands.

Subscription rates have been changed, for 2022 they are:

Small subscription	1 - 10 users at one physical location: € 140.00/year ex VAT
Medium subscription	1 - 50 users at multiple physical locations in the organisation: € 410.00/year ex VAT
Worldwide in-company subscription	€ 875.00/year ex VAT
Single issues:	€ 45.00 per issue ex VAT

Fertiliser companies



Agricultural cooperatives

(Dutch - with international network of subsidiaries)



Fertiliser research



Liquid fertiliser applicators



Soil services



Mycorrhizae



How to advertise

Advertisements in the international Plant nutrition *courier* are published in six consecutive issues including one free issue. Follow [this hyperlink](#) for details about advertising in the Plant nutrition *courier* and/or in the email newsletter.

Colophon

Editor	Gert van den Berg
Publisher	Landbouwkundige Uitgeverij G.C. van den Berg
Address	Van Maerlantstraat 5, 3906 EL Veenendaal, The Netherlands
Website	www.plantnutritioncourier.nl
Subscriptions	Small: € 135,00/year ex VAT (1 - 10 readers at one physical location of the organisation). Medium: € 395,00/year ex VAT (11 - 50 readers at multiple physical locations of the organisation). Worldwide: € 845,00/year ex VAT (worldwide in-company subscription).
Single issues	€ 40,00/issue ex VAT.

Plant nutrition *courier* is an internationally published bimonthly digital newsletter on plant nutrition, including silicon and other beneficial elements. Authors and publisher declare the information in the Plant nutrition *courier* is provided to our best knowledge of the current situation, but they cannot accept responsibility for the validity or for the consequences of their use. Subscriptions will be extended, unless cancelled at least one month before the end of the yearly subscription.